

Nº 47142

APPLICATION FOR PERMIT

TO APPROPRIATE THE PUBLIC WATERS OF THE STATE OF NEVADA

Date of filing in State Engineer's Office.....~~AUG 6 8 1983~~ NEW PRIORITY DATE APR 29 1986

SEP 1 1983

Returned to applicant for correction.....

Corrected application filed.....

JUL 5 1983 under 46951

Map filed.....

The applicant Trans-Pacific Geothermal, Inc.

1419 Broadway, of Oakland,  
Street and No. or P.O. Box No. City or Town

California 94612, hereby make application for permission to appropriate the public  
State and Zip Code No.

waters of the State of Nevada, as hereinafter stated. (If applicant is a corporation, give date and place of incorporation; if a copartnership or association, give names of members.) TGS Associates is a partnership

comprised of Trans-Pacific Geothermal, Inc., incorporated in Nevada 11/16/81 and  
SR Geothermal, Inc., incorporated in Delaware 9/23/81.

1. The source of the proposed appropriation is deep geothermal reservoir - 10,000 feet  
Name of stream, lake, spring, underground or other source

2. The amount of water applied for is five (5) second-feet  
One second-foot equals 448.83 gals. per min.

(a) If stored in reservoir give number of acre-feet.....

3. The water to be used for industrial purposes  
Irrigation, power, mining, manufacturing, domestic, or other use. Must limit to one use.

4. If use is for:

(a) Irrigation, state number of acres to be irrigated:.....

(b) Stockwater, state number and kinds of animals to be watered:.....

(c) Other use (describe fully under "No. 12. Remarks") industrial

(d) Power:

(1) Horsepower developed no external pumps will be used

(2) Point of return of water to stream reinjection or surface disposal; will depend on  
water quality.

5. The water is to be diverted from its source at the following point: Located in the NE/4 of SW/4,  
Describe as being within a 40-acre subdivision of public  
Sec 33, T25N, R37E, MDM, from whence the SW corner of Sec 33 bears S 49°17' 55"W,  
survey, and by course and distance to a section corner. If on unsurveyed land, it should be so stated.  
a distance of 3042.45 feet.

6. Place of use NE/4 of SW/4, Sec 33, T25N, R37E, MDM  
Describe by legal subdivision. If on unsurveyed land, it should be so stated.

7. Use will begin about January 1 and end about December 31, of each year.  
Month and Day Month and Day

8. Description of proposed works. (Under the provisions of NRS 535.010 you may be required to submit plans and specifications of your diversion or storage works.) The proposed works would be the completed geo-  
thermal well. Water would be diverted from the  
geothermal reservoir through the State manner in which water is to be diverted, i.e. diversion structure, ditches and  
beneficial use which is well flow testing to evaluate the geothermal reservoir. The  
wellbore will be cased to an estimated depth of 6300 feet.  
flumes, drilled well with pump and motor, etc.

9. Estimated cost of works one million five hundred thousand dollars (\$1,500,000)

10. Estimated time required to construct works..... 60-90 days  
If well completed, describe works.

11. Estimated time required to complete the application of water to beneficial use..... three years (3)

12. Remarks: For use other than irrigation or stock watering, state number and type of units to be served or annual consumptive use.  
The industrial use of appropriated water, consequent to this application, would be the production of water or geothermal effluent from wellhead, then through surface pipeline, to electrical generating plant. Additional economic utilization of the geothermal energy may be affected subsequent to or separate from electrical generation. Estimated consumption: 500,000 lbs. per hr. per well, 24 hrs a day, 365 days per year.

By s/Walter Turnbull  
Walter Turnbull, Secretary-Treasurer  
1419 Broadway  
Oakland, CA 94612

Compared dcb/bl jm/br

Protested.....

APPROVAL  
OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit is issued subject to existing rights. It is understood that the amount of geothermal fluid herein granted is only a temporary allowance and that the final right obtained under this permit will be dependent upon the amount actually placed to beneficial use. It is also understood that this right must allow for a reasonable decrease of fluid pressure and heat. The well shall be equipped and maintained to prevent any waste of the geothermal fluid. Accurate measurements must be kept of discharge of the production and the amount of fluid injected into the injection well to determine the total amount of fluid consumed for a beneficial use.

The production and injection well is to be cemented from the producing levels to the surface to protect fresh water zones. This permit is issued subject to the condition that only geothermal fluids are to be diverted and used beneficially for heating purposes and fresh, cold water aquifers are not to be diverted. The used geothermal fluids are to be returned to the source via the injection well. The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies. A detailed log on the injection well and/or other analyses of the system used for returning the used geothermal to the source must be submitted together with the Proof of Completion.

An annual report for this well must be filed under this permit describing the The amount of water to be appropriated shall be limited to the amount which can be applied to beneficial use, and

not to exceed 5.0 cubic feet per second, but not to exceed 644 acre-feet per annum

Work must be prosecuted with reasonable diligence and be completed on or before January 13, 1986

Proof of completion of work shall be filed before February 13, 1986

Application of water to beneficial use shall be made on or before January 13, 1991

Proof of the application of water to beneficial use shall be filed on or before February 13, 1991

Map in support of proof of beneficial use shall be filed on or before February 13, 1991

Completion of work filed MAY 02 1986 IN TESTIMONY WHEREOF, I PETER G. MORROS

State Engineer of Nevada, have hereunto set my hand and the seal of

Proof of beneficial use filed..... my office, this 13th day of JANUARY

Cultural map filed.....

A.D. 19 84

Certificate No..... Issued.....

*[Signature]*  
State Engineer

218 (Rev.)

Approved by 62090 355

APR 07 1986

CANCELLATION OF APPLICANT TO COMPLY WITH THE PROVISIONS OF PERMIT

*[Signature]*  
STATE ENGINEER  
Cancellation recorded 5-286

(PERMIT TERMS CONTINUED)

amount of geothermal fluid consumed to a beneficial use for the calendar year. This report must also detail the amount of fluid produced and injected.

The total withdrawal of the geothermal fluid shall be limited to 3222 acre-feet per year but the total consumptive use of the geothermal fluid is limited to 644 acre-feet per year.

The total consumptive use under this permit and Permit 46951 shall not exceed 644 acre-feet per annum.

This Permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal, and local agencies.

This permit is issued under the provisions of NRS 534.120(2) as a preferred use.